**PARTIAL REPLACEMENT OF COARSE AGGREGATES BY POLYSTYRENE BEDS IN CONCRETE**

**ABSTRACT**

With the development of modern construction techniques, the demand for construction materials increases day by day. There is a strong need to utilize alternative materials for sustainable development. The usage of partial replacement of coarse aggregate using polystyrene beads in concrete gives prospective solution to building construction industry. Polystyrene beads are the waste material obtained from packaging industries. This paper handles comparison of concrete which partially replaces coarse aggregate by polystyrene beads with conventional concrete blocks. The result shows that amount of the polystyrene beads incorporated in concrete influences the properties of hardened concrete. Also, the compressive strength and split tensile strength of 5%, 10%, 15%, 20% replacement of coarse aggregate for M25 mix shown. The workability of mix is very high at a low water/cement ratio.